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UTILITY PATENT APPLICATION TRANSMITTAL

Attorney Docket No. 03DJS02

First Inventor David J. Smith

Title Cast Film Cooling Method

Express Mail Label No. FK 981264129LIS

(Only for new nonprovision	nal applications under 37 CFR 1.53(b))	Express Mail Label No. EK 981264129US						
	TION ELEMENTS terning utility patent application contents.	ADDRESS TO: Assistant Commissioner for Patents Box Patent Application Washington, DC 20231						
1. Fee Transmittal Fe (Submit an original and a Applicant claims s See 37 CFR 1.27. 3. Specification (preferred arrangemen - Descriptive title - Cross Reference - Statement Register - Reference to second a computer property of the computer of the compute	prim (e.g., PTO/SB/17) duplicate for fee processing) mall entity status. [Total Pages 10] It set forth below) of the invention e to Related Applications arding Fed sponsored R & D equence listing, a table, program listing appendix the Invention of the Invention n of the Drawings (if filed)	7. CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix) 8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary) a. Computer Readable Form (CRF) b. Specification Sequence Listing on: i. CD-ROM or CD-R (2 copies); or ii. paper c. Statements verifying identity of above copies ACCOMPANYING APPLICATION PARTS 9. Assignment Papers (cover sheet & document(s))						
b. Copy from a (for continua) i. DELET Signed ste		10. (when there is an assignee) 11. English Translation Document (if applicable) 12. Information Disclosure Copies of IDS Statement (IDS)/PTO-1449 13. Preliminary Amendment 14. Return Receipt Postcard (MPEP 503) (Should be specifically itemized) 15. Certified Copy of Priority Document(s) (if foreign priority is claimed) 16. Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35						
or its equivalent. Other: 18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76: Continuation C								
	19. CORRESPOND							
Customer Number or Bar C	ode Label 34339	or Correspondence address below						
Name	Donald J. Shade							
Address City Country	c/o Battenfeld Gloucester Engineering Co., Inc. 11 Dory Road, PO Box 900 Gloucester State Massachusetts Zip Code 01931-0900 USA Telephone 978.282.9317 Fax 978.282.911							
Name (Print/Type) Signature	Dorgald J. Shade	Registration No. (Attorney/Agent) 31059 Cull Date U/23/03						

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PTO/SB/17 (05-03)

Approved for use through 04/30/2003. OMB 0651-0032

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FEE TRANS	RAITTAI	Complete if Known				
FEE IRANS	WILLIAL	Application Number				
for FY 2	ሰ ሰ3	Filing Date				
Effective 01/01/2003. Patent fees are subj		First Named Inventor	David J. Smith			
		Examiner Name				
Applicant claims small entity status. Se	ee 37 CFR 1.27	Art Unit				
TOTAL AMOUNT OF PAYMENT	(\$) 790	Attorney Docket No.	03DJS02			

1 Medical Parameters (1997)								
METHOD OF PAYMENT (check all that apply)	FEE CALCULATION (continued)							
Check Credit card Money Other None	3. ADDITIONAL FEES							
Deposit Account:	<u>Large</u>	Entity	Small	Entity				
Deposit Account:	Fee	Fee		Fee	Fee Description			
Account	Code 1051	(\$) 130	Code 2051	(\$) 65	Sureharas late filing for or ooth	Fee Paid		
Number Deposit	1051	50	2051		Surcharge - late filing fee or oath Surcharge - late provisional filing fee or	—— —		
Account	1002	ວບ	2052	20	cover sheet			
Name The Director is authorized to: (check all that apply)	1053	130	1053		Non-English specification			
Charge fee(s) indicated below Credit any overpayments	1812	2,520	1812	2,520	For filing a request for ex parte reexamination			
Charge any additional fee(s) during the pendency of this application	1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action			
Charge fee(s) indicated below, except for the filing fee	Į.	1.840*	1805	1 840*	Requesting publication of SIR after			
to the above-identified deposit account.	,,,,,	1,040	1000	1,040	Examiner action			
FEE CALCULATION	1251	110	2251	55	Extension for reply within first month			
1. BASIC FILING FEE	1252	410	2252	205	Extension for reply within second month	<u> </u>		
Large Entity Small Entity	1253	930	2253	465	Extension for reply within third month			
Fee Fee Fee Fee Gee Paid Code (\$) Code (\$)	1254	1,450	2254	725	Extension for reply within fourth month			
1001 750 2001 275 Hility filing foo	1255	1,970	2255	985	Extension for reply within fifth month			
1002 330 2002 165 Design filing fee 750	1401	320	2401	160	Notice of Appeal	l!		
1003 520 2003 260 Plant filing fee	1402	320	2402		Filing a brief in support of an appeal			
1004 750 2004 375 Reissue filing fee	1403	280	2403		Request for oral hearing			
1005 160 2005 80 Provisional filing fee		1,510	1451		Petition to institute a public use proceeding			
	1452	110	2452		Petition to revive - unavoidable			
SUBTOTAL (1) (\$) 750	l	1.300	2453		Petition to revive - unintentional			
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE	ŀ	1,300	2501		Utility issue fee (or reissue)			
Fee from Ext <u>ra Claims below</u> Fee Paid	1502	470	2502		Design issue fee	 		
Total Claims -20** = X =	1503	630	2503		Plant issue fee			
Independent Claims - 3** = X =	1460	130	1460		Petitions to the Commissioner			
Multiple Dependent =0	1807	50	1807		Processing fee under 37 CFR 1.17(q)			
Large Entity Small Entity	1806	180	1806		Submission of Information Disclosure Stmt			
Fee Fee Fee Fee Description					Recording each patent assignment per	<u> </u>		
Code (\$) Code (\$) 1202 18 2202 9 Claims in excess of 20	8021	40	8021	1 40	property (times number of properties)	40		
1201 84 2201 42 Independent claims in excess of 3	1809	750	2809	375	Filing a submission after final rejection (37 CFR 1.129(a))			
1203 280 2203 140 Multiple dependent claim, if not paid	1010	750	2810	275	, , , , , , , , , , , , , , , , , , , ,	\vdash		
1204 84 2204 42 ** Reissue independent claims	1810	750	2010) 3/5	For each additional invention to be examined (37 CFR 1.129(b))			
over original patent	1801	750	2801	375	Request for Continued Examination (RCE)			
1205 18 2205 9 ** Reissue claims in excess of 20 and over original patent	1802	900	1802	900	Request for expedited examination of a design application			
SUBTOTAL (2) (\$) 0	fee (sp	ecify) _						
SUBTOTAL (2) (\$) U **or number previously paid, if greater; For Reissues, see above	*Redu	uced by	Basic I	Filing F	ee Paid SUBTOTAL (3) (\$) 40			

0			_					
SUBMITTED BY (Complete (if applicable)								
Name (Print/Type)	Dogald J. Shade	. 1	_/,	Registration No. (Attorney/Agent)	31059	Telephone	e 978.282.9317	
Signature	Manuel	1.	Mil	rell	•	Date	4/23/03	

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This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/06 (05-03)
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875							Application or Docket Number 03DJS02		
CLAIMS AS FILED – PART I (Column 1) (Column 2)			SMALL E	SMALL ENTITY		OTHER THAN SMALL ENTITY			
FOR	NUMBER FILED	NUMBE	R EXTRA	RATE	FEE		RATE	FEE	
BASIC FEE (37 CFR 1.16(a))					s <u>750</u>	OR		\$	
TOTAL CLAIMS (37 CFR 1.16(c))	minus 20	0		x \$ =	0	OR	x \$ =		
INDEPENDENT CLAIMS (37 CFR 1.16(b))	minus 20	<u>.</u> . 0		x \$=	Ō	OR	x \$=		
MULTIPLE DEPENDENT C	CLAIM PRESENT (37	CFR 1.16(d))		+ \$=	0	OR	+ \$=		
* If the difference in colum	nn 1 is less than zero, ente	er "0" in column :	2.	TOTAL	750	OR	TOTAL		
CLAIN	MS AS AMENDED -	PART II							
(0	Column 1)	(Column 2)	(Column 3)	SMALL E	ENTITY	OR	OTHER SMALL		
	CLAIMS REMAINING AFTER MENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE	ADDI- TIONAL FEE		RATE	ADDI- TIONAL FEE	
Total * (37 CFR 1.16(c))		**	=	x \$=		OR	x \$=) too too	
Total (37 CFR 1.16(b)) Independent (37 CFR 1.16(b)) V	Minus	***	=	x \$=		OR	x \$=		
FIRST PRESENTATION	ON OF MULTIPLE DEPENDEN	IT CLAIM (37 CF	R 1.16(d))	+\$ =		OR	+s =		
				TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE		
(0	Column 1)	(Column 2)	(Column 3)			_			
	CLAIMS REMAINING AFTER MENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE	ADDI- TIONAL FEE		RATE	ADDI- TIONAL FEE	
Total * (37 CFR 1.16(c))	Minus	••	=	x \$=	_	OR	x \$=		
Total (37 CFR 1.18(b)) Independent (37 CFR 1.18(b))	Minus	***	=	x \$=		OR	x \$=		
FIRST PRESENTATION	ON OF MULTIPLE DEPENDEN	IT CLAIM (37 CF	R 1.16(d))	+ \$=		OR	+ \$=		
				TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE		
(0	Column 1)	(Column 2)	(Column 3)						
5	CLAIMS EMAINING AFTER MENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE	ADDI- TIONAL FEE		RATE	ADDI- TIONAL FEE	
Total (37 CFR 1.16(c))	Minus	**	=	x \$=		OR	× \$=		
Total (37 CFR 1.18(b)) Independent (37 CFR 1.18(b))	Minus	***	=	x \$=		OR	x \$=		
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(d))				+ \$=		OR	+ \$=		
	TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE					
 If the entry in column 1 is less than the entry in column 2, write "0" in column 3. If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1. 									

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

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